



8.7: LV contactor gear

Plant item: LV contactor gear Identification/location: Contractor: Manufacturer: Serial No:				Completed						
				Incomplete						
				Pc address - file						
No	Activity	Witnessed		Date						
		Engineer (HCP)	Contractor							
1	Check all components fitted to general assembly drawing.									
2	Check tightness of all fastenings.									
3	Check labelling and warning symbols to relevant diagram.									
4	Check earth connection to main earth system.									
5	Check all flash guards and contacts aligned.									
6	Check mechanical operation and interlocks.									
7	*IR check 415V circuit using megger. <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr> <td style="padding: 5px;">R-Y</td> <td style="padding: 5px;">R-B</td> <td style="padding: 5px;">Y-B</td> </tr> <tr> <td style="padding: 5px;">R-E</td> <td style="padding: 5px;">B-E</td> <td style="padding: 5px;">B-E</td> </tr> </table>				R-Y	R-B	Y-B	R-E	B-E	B-E
R-Y	R-B				Y-B					
R-E	B-E				B-E					
	*Short circuit/disconnect all electronic equipment which could be damaged before megger testing.									
8	D.c. operated contactors – check that contactor operates at: (i) 80% of rated voltage (close); (ii) 50% of rated voltage (trip).									
9	A.c. operated contactors – check that contactor operates at: (i) 85% of rated voltage and remains closed down to 75% of rated voltage.									
10	Operate contactor five times at normal operating voltage.									
11	Check current ratings of all fuselinks.									
Witnessed	Engineer(HCP)	Contractor	Date	Sheet 1 of 1						
Print name and sign										



8.8: Motor thermal overload device: overload injection

Plant item: Motor thermal overload device: overload injection Identification/location: Contractor: Manufacturer: Serial No:		Completed		
		Incomplete		
		Pc address - file		
No	Activity	Witnessed		Date
		Engineer (HCP)	Contractor	
1	<p><i>Relay data</i></p> <p>Type..... Serial no.....</p> <p>Element fitted..... Circuit FLC.....</p> <p>CT ratio..... CT tapping.....</p> <p>Trip level setting..... Phases.....</p> <p>Note: trip level setting will normally be circuit or motor full load current (FLC).</p>			
2	<p>With all three phases connected in series, check starting curve (cold), measure time to trip at three times FLC.</p> <p>Time from curve..... sec.</p> <p>Time measured..... sec.</p> <p>Time measured to be within.....% of optimum characteristic.</p>			
3	<p>Reduce current to zero and ensure that relay will reset when cold.</p> <p>Single phasing check: maintain at circuit FLC and allow relay to reach a stable state. Inject 2.5 times FLC level setting through left and centre elements in series. Repeat through centre and right elements in series. Measure times to trip.</p> <p>LH and centre..... sec.</p> <p>RH and centre..... sec.</p> <p>Time measured to be within.....% of manufacturer's specified time.</p>			
4	<p>Stability check: carry out stability test at FLC level setting for 15 minutes. All temporary connections and shorts removed on completion.</p>			
	Witnessed	Engineer(HCP)	Contractor	Date
	Print name and sign			

